REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed February 22, 2008. Reconsideration and allowance of the application and presently pending claims, as amended, are respectfully requested.

Present Status of Patent Application

Upon entry of this Amendment, claims 1-29 are pending in the present application. Claim 18 is amended herein to correct the dependency; claim 18 now properly depends from claim 17 instead of claim 13. Applicants wish to clarify that the foregoing amendment is made for purposes of correcting dependency of a claim only, and not in response to rejections made based on prior art. Indeed, Applicants submit that no substantive limitations have been added to the claims. Therefore, no prosecution history estoppel arises from these amendments. *Black & Decker, Inc. v. Hoover Svc. Ctr.*, 886 F.2d 1285, 1294 n. 13 (Fed. Cir. 1989); *Andrew Corp. v. Gabriel Elects., Inc.*, 847 F.2d 819 (Fed. Cir. 1988); *Hi-Life Prods. Inc. v. Am. Nat'l. Water-Mattress Corp.*, 842 F.2d 323, 325 (Fed. Cir. 1988); *Mannesmann Demag Corp. v. Eng'd Metal Prods. Co., Inc.*, 793 F.2d 1279, 1284-1285 (Fed. Cir. 1986); *Moeller v. Ionetics, Inc.*, 794 F.2d 653 (Fed. Cir. 1986).

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims. Applicants believe that no new matter has been added and that a new search is not necessary

Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-29 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over DeBenedictis et al. (U.S. Patent 6471906) and Baek et al. (U.S. Patent 9404690). Applicants respectfully traverse this rejection for at least the following reasons.

Independent claims 1, 13, and 24 each claim the use of both a tension gate and an air shield in a relax zone of a yarn making process. While the cited art teaches the use of a tension gate (DeBenedictis et al.) or an air shield (Baek et al.),

neither reference discloses, teaches, or suggests the combination of the tension gate and the air shield. In fact, Applicants note on page 1 of the Specification that both air shields and tension gates and their use in the relax stage of yarn production are known. However, the claimed combination of these two elements provides a surprising and synergistic effect over the use of either the air shield or tension gate alone, which renders the claimed processes and apparatus novel and non-obvious.

The data presented in Example 1 (Specification, page 10-11) and Figure 4 provide support for the non-obviousness of the instant claims. Specifically, Figure 4 compares the stability of yarn for increasing yarn draw speeds during four runs on a yarn processing apparatus where the only variable is the combination of elements in the relax stage. Run 1 uses no tension gate or air shield; Run 2 employs only a tension gate; Run 3 includes only an air shield; and Run 4 combines the use of the tension gate and the air shield. As discussed on page 11 of the Specification, the combination (Run 4) was not expected to yield a significantly different result than the air shield alone (Run 3) or tension gate alone (Run 2), because once the yarns are stable on the relax rolls, only minor improvements would be expected. The best that would be expected by one of skill in the art from the combination of the tension gate and air shield would be an additive effect (*e.g.*, a speed increase of 620 mph (the 360 mpm increase from Run 2 plus the 260 mpm increase from Run 3) while maintaining a stability rating of 3). Thus, one of skill in the art would not have been motivated to combine the two elements for only the minor increases that would have been expected. However, it was surprisingly found that a speed increase of 60% (1,100 mpm) was possible while maintaining the stability of the yarn (see Table 1 and Figure 4). This synergistic effect would not have been expected by one of skill in the art. Thus, Applicants respectfully submit that the claimed process and apparatus of claims 1, 13, and 24 are novel and non-obvious over the art of record. Applicants therefore respectfully request that the rejection of these claims be withdrawn and the claims be allowed.

Because independent claims 1, 13, and 24 are allowable, then for at least this reason dependent claims 1-12, 14-23 and 25-29 are also allowable. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Further, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known for at least the specific and particular reason that the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully Submitted,

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